

Naval Air Station Brunswick
Cumberland County
Brunswick, Maine
A-268-71-AA-R (SM)

**Departmental
Findings of Fact and Order
Air Emission License**

After review of the air emissions license application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

Naval Air Station Brunswick (NASB) located in Brunswick, Maine has applied to renew their Air Emission License permitting the operation of emission sources associated with their military flight operations facility.

B. Emission Equipment

The following equipment is addressed in this air emission license:

Fuel Burning Equipment

<u>Equipment</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Maximum Firing Rate</u>	<u>Fuel Type, % sulfur</u>
Hangar 1, Boiler #1	5.50	39.3 gal/hr	#2 fuel oil / #1 fuel oil / natural gas, 0.50%
Hangar 1, Boiler #2	5.50	39.3 gal/hr	#2 fuel oil / #1 fuel oil / natural gas, 0.50%
Hangar 1, Boiler #3	5.50	39.3 gal/hr	#2 fuel oil / #1 fuel oil / natural gas, 0.50%
Bldg 86, Boiler #1	3.0	21.4 gal/hr	#2 fuel oil / #1 fuel oil / natural gas, 0.50%
Bldg 86, Boiler #2	3.0	21.4 gal/hr	#2 fuel oil / #1 fuel oil / natural gas, 0.50%

<u>Equipment</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Maximum Firing Rate</u>	<u>Fuel Type, % sulfur</u>
Bldg 86, Boiler #3	3.0	21.4 gal/hr	#2 fuel oil / #1 fuel oil / natural gas, 0.50%
Bldg 250, Boiler #1	6.0	42.9 gal/hr	#2 fuel oil / #1 fuel oil / natural gas, 0.50%
Bldg 250, Boiler #2	6.0	42.9 gal/hr	#2 fuel oil / #1 fuel oil / natural gas, 0.50%
Bldg 250, Boiler #3	6.0	42.9 gal/hr	#2 fuel oil / #1 fuel oil / natural gas, 0.50%
Bldg 250, Make-up #1	2.75	2,670 scf/hr	natural gas, negligible
Bldg 211, Boiler #3	5.5	39.3 gal/hr	#2 fuel oil / #1 fuel oil / natural gas, 0.50%
Bldg 211, Boiler #4	6.2	44.3 gal/hr	#2 fuel oil / #1 fuel oil / natural gas, 0.50%
Bldg 211, Boiler #5	6.2	44.3 gal/hr	#2 fuel oil / #1 fuel oil / natural gas, 0.50%
Bldg 594, Boiler #1	1.5	10.7 gal/hr	#2 fuel oil / #1 fuel oil / natural gas, 0.50%
Bldg 594, Boiler #2	1.5	10.7 gal/hr	#2 fuel oil / #1 fuel oil / natural gas, 0.50%
Bldg 516, Boiler #1	1.6	11.4 gal/hr	#2 fuel oil / #1 fuel oil / natural gas, 0.50%
Bldg 54, Boiler #1	2.2	15.7 gal/hr	#2 fuel oil / #1 fuel oil / natural gas, 0.50%
Bldg 645, Boiler #1	1.7	12.1 gal/hr	#2 fuel oil / #1 fuel oil / natural gas, 0.50%
Hangar 6, Boiler #1	3.0	2,920 scf/hr	natural gas, negligible
Hangar 6, Boiler #2	3.0	2,920 scf/hr	natural gas, negligible
Hangar 6, Boiler #3	3.0	2,920 scf/hr	natural gas, negligible
Hangar 6, Make-up #1	4.76	4,620 scf/hr	natural gas, negligible

<u>Equipment</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Maximum Firing Rate</u>	<u>Fuel Type, % sulfur</u>
Hangar 6, Make-up #2	4.76	4,620 scf/hr	natural gas, negligible
Hangar 6, Make-up #3	4.76	4,620 scf/hr	natural gas, negligible
Hangar 6, Make-up #4	4.76	4,620 scf/hr	natural gas, negligible
Hangar 5, Boiler #1	4.25	30.4 gal/hr	#2 fuel oil / #1 fuel oil / natural gas, 0.50%
Hangar 5, Boiler #2	4.25	30.4 gal/hr	#2 fuel oil / #1 fuel oil / natural gas, 0.50%
Hangar 5, Boiler #3	4.25	30.4 gal/hr	#2 fuel oil / #1 fuel oil / natural gas, 0.50%
Hangar 5, Boiler #4	4.25	30.4 gal/hr	#2 fuel oil / #1 fuel oil / natural gas, 0.50%
Bldg 512, Boiler #1	1.3	9.3 gal/hr	#2 fuel oil / #1 fuel oil / natural gas, 0.50%
Bldg 512, Boiler #2	1.25	8.9 gal/hr	#2 fuel oil / #1 fuel oil / natural gas, 0.50%
Bldg 512, Boiler #3	1.25	8.9 gal/hr	#2 fuel oil / #1 fuel oil / natural gas, 0.50%
Bldg 102, Make-up #1	1.5	1,460 scf/hr	natural gas, negligible
Bldg 750, Water Heater #1	1.8	1,770 scf/hr	natural gas, negligible
Bldg 750, Water Heater #2	1.8	1,770 scf/hr	natural gas, negligible
Bldg 750, Make-up #1	1.2	1,165 scf/hr	natural gas, negligible

Electrical Generation Equipment

<u>Equipment</u>	<u>Power Output (kW)</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Firing Rate (gal/hr)</u>	<u>Fuel Type, % sulfur</u>
Engine #4 (Bldg 200)	230	2.2	16.4	diesel, 0.05%
Engine #18-1 (Bldg 295)	287	2.8	20.4	diesel, 0.05%
Engine #18-2 (Bldg 295)	287	2.8	20.4	diesel, 0.05%
Engine #18-3 (Bldg 295)	287	2.8	20.4	diesel, 0.05%
Engine #18-4 (Bldg 295)	287	2.8	20.4	diesel, 0.05%
Engine #26 (Bldg 594)	300	2.9	21.4	diesel, 0.05%
Engine #27 (Bldg 594)	230	2.2	16.4	diesel, 0.05%
Engine #29 (Bldg 645)	275	2.7	19.6	diesel, 0.05%
Engine #30 (Bldg 646)	100	1.0	7.2	diesel, 0.05%
Engine #31 (Bldg 86)	80	0.8	5.7	diesel, 0.05%
Engine #32 (Bldg 654)	125	1.2	8.9	diesel, 0.05%
Engine #42 (Bldg 292)	125	1.2	8.9	diesel, 0.05%
Engine #44 (spare)	60	0.6	4.3	diesel, 0.05%
Engine #46 (Bldg 537)	80	0.8	5.7	diesel, 0.05%
Engine #47 (Bldg 250)	900	8.8	64.1	diesel, 0.05%
Engine #48 (Bldg 554)	160	1.6	11.4	diesel, 0.05%
Engine #49 (Bldg 209)	400	3.9	28.5	diesel, 0.05%
Engine #50 (spare)	320	3.1	22.8	diesel, 0.05%

<u>Equipment</u>	<u>Power Output (kW)</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Firing Rate (gal/hr)</u>	<u>Fuel Type, % sulfur</u>
Engine #51 (spare)	228	2.2	16.2	diesel, 0.05%
Engine #52 (spare)	200	2.0	14.2	diesel, 0.05%
Engine #53 (Hangar 6)	230	2.7	2,574 scf/hr	natural gas, negligible
Engine #55 (Main Gate)	75	0.8	5.8	diesel, 0.05%
Engine #56 (Dyer's Gate)	100	1.0	7.2	diesel, 0.05%
Engine #57 (Bldg 231)	350	4.9	4,760 scf/hr	natural gas, negligible
Engine #58 (Hangar 5)	300	2.9	21.4	diesel, 0.05%

Process Equipment

<u>Equipment</u>	<u>Location</u>
Storage Tanks	Bldgs 650, 651 and various other locations
Fuel Dispensing	Bldgs 117, 538, 39
Deicing Operations	aircraft and runway
Degreasers	various
Painting Operations	Bldgs 86, 250 and Hangar 6
Jet Engine Test Cells	Bldg 611

C. Application Classification

The application for NASB does not include the licensing of increased emissions or the installation of new or modified equipment. Therefore, the license is considered to be a renewal of current licensed emission units only and has been processed through Chapter 115 of the Department's regulations. With the facility wide fuel limits on the licensed fuel burning equipment and electrical generating equipment, as well as the facility wide VOC and HAP emission limits for licensed sources, the facility is licensed below the major source thresholds and is considered a synthetic minor.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in Chapter 100 of the Department regulations. Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

B. Fuel Burning Equipment

The boilers, water heaters, and make-up air units listed in this license are all used for facility heating and hot water needs.

None of these units are greater than 10 MMBtu/hr and they are therefore not subject to the New Source Performance Standards (NSPS) Subpart Dc for steam generating units greater than 10 MMBtu/hr manufactured after June 9, 1989.

A summary of the BPT analysis for the fuel burning equipment is the following:

1. The combined fuel usage for the boilers, water heaters and air make-up units of #2 fuel oil, #1 fuel oil and natural gas shall not exceed the equivalent of 350,000 MMBtu/year, based on a 12 month rolling total. The maximum sulfur content of the fuel oil shall not exceed 0.50% by weight.
2. Chapter 106 regulates fuel sulfur content, however in this case a BPT analysis for SO₂ determined a more stringent limit of 0.50% was appropriate and shall be used.
3. For fuel oil fired equipment greater than 3.0 MMBtu/hr, Chapter 103 regulates PM emission limits. The PM₁₀ limits and the PM limit for smaller equipment are derived from Chapter 103.
4. For natural gas fired equipment, a BPT analysis for PM determined that an emission limit of 0.05 lb/MMBtu was appropriate and shall be used. The PM₁₀ limits are derived from the PM limits.
5. NO_x emission limits for fuel oil fired units are based on data from similar boilers of this size and age.

6. NO_x emission limits for natural gas fired units are based on AP-42 data dated 7/98.
7. CO and VOC emission limits are based upon AP-42 data for natural gas firing dated 7/98. This data is most conservative and has been used for all fuel burning equipment.
8. Visible emissions from the fuel burning equipment shall not exceed 10% opacity on a six (6) minute block average, except for no more than one (1) six (6) minute block average in a continuous 3-hour period.

C. Engines

NASB operates several diesel and natural gas fired engines for back-up power in case of a circumstance in which the base loses power.

A summary of the BPT analysis for NASB's engines is the following:

1. The facility's engines shall fire only diesel fuel with a maximum sulfur content not to exceed 0.05% by weight or natural gas.
2. The combined fuel usage to the engines of diesel fuel and natural gas shall not exceed the equivalent to 4,100 MMBtu/year heat input, based on a 12-month rolling total.
3. Chapter 106 regulates fuel sulfur content, however in this case a BPT analysis for SO₂ determined a more stringent limit of 0.05% was appropriate and shall be used.
4. The PM and PM₁₀ limits are derived from Chapter 103.
5. NO_x, CO, and VOC emission limits for diesel fired engines are based upon AP-42 data dated 10/96.
6. NO_x, CO, and VOC emission limits for natural gas fired engines are based upon AP-42 data dated 7/00.
7. Visible emissions from the engines shall each not exceed 20% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period.

D. Process Equipment

1. Storage Tanks

NASB operates several above ground storage tanks for the storage of various petroleum products and other substances that require bulk storage. Of these storage tanks there are two tanks referred to as JFSI/1 and JFSI/2 that store large quantities of JP-8. NASB maintains records of all non-exempt storage tanks and the throughput for each.

2. Fuel Dispensing Operations

Buildings 117, 538 and 39 are equipped with gasoline dispensing equipment for the facility. NASB maintains records of all product dispensed and delivered on a monthly basis. Building 538 is equipped with Stage I and II controls to meet the requirements of Chapter 118. Building 117 is equipped with a Stage I vapor balance system to meet the requirements of Department Regulations Chapter 118 and further controlled by Stage II control equipment.

3. Deicing Operations

Due to the flight operations conducted at NASB aircraft must be maintained in operable status. During inclement weather crews must often deice the aircraft before take-off using propylene glycol. NASB maintains records of all propylene glycol usage by squadron on a monthly basis.

4. Degreasers

NASB operates various degreasing units throughout the facility that are subject to the requirements of Chapter 130. NASB maintains records to comply with Chapter 130.

5. Painting Operations

NASB conducts a multitude of painting operations throughout the facility. However, the majority of the parts coating operations for the facility take place in booths located in Building 86, Building 250, and Hangar 6. Each booth is equipped with high efficiency filters to control emissions. NASB maintains records of hours of operation, material and usage amount along with VOC content (as documented by MSDS sheets) per month for each of these units to document the quantity of VOC emissions.

6. Jet Engine Test Cells

NASB operates two engine test cells, a small APU unit and a larger T-56 unit. NASB maintains records of usage for each unit.

7. Misc. Fugitive Emissions

There are various miscellaneous fugitive VOC and/or HAP emissions from work conducted at squadron locations throughout the facility. NASB maintains records for these activities documenting the type of activity (painting, tank cleaning, etc.), location and usage/emission on a monthly basis. NASB shall continue to maintain such records for each activity not listed in Chapter 115, Appendix B.

E. Annual Emissions

NASB shall be restricted to the following annual emissions, based on a 12 month rolling total:

**Total Licensed Annual Emission for the Facility
Tons/year**

(used to calculate the annual license fee)

	PM	PM₁₀	SO₂	NO_x	CO	VOC	HAP
Fuel Burning	21.0	21.0	88.1	61.3	14.4	0.9	-
Diesel Engines	0.3	0.3	0.1	9.1	2.0	0.7	-
Engine #53	0.1	0.1	-	1.5	2.5	0.2	-
Engine #57	0.1	0.1	-	2.7	4.6	0.4	-
Process Emissions	-	-	-	-	-	45.8	9.9
Total TPY	21.5	21.5	88.2	74.6	23.5	48.0	9.9

III.AMBIENT AIR QUALITY ANALYSIS

NASB previously submitted an ambient air quality analysis (February 1999) demonstrating that emissions from the facility, in conjunction with all other sources, do not violate ambient air quality standards. An additional ambient air quality analysis is not required for this renewal.

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-268-71-AA-R subject to the following conditions:

STANDARD CONDITIONS

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (Title 38 MRSA §347-C).

- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 115. [MEDEP Chapter 115]
- (3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [MEDEP Chapter 115]
- (4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [MEDEP Chapter 115]
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. §353. [MEDEP Chapter 115]
- (6) The license does not convey any property rights of any sort, or any exclusive privilege. [MEDEP Chapter 115]
- (7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [MEDEP Chapter 115]
- (8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [MEDEP Chapter 115]
- (9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license. [MEDEP Chapter 115]
- (10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license. [MEDEP Chapter 115]

- (11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:
- A. perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
 - 1. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
 - 2. pursuant to any other requirement of this license to perform stack testing.
 - B. install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
 - C. submit a written report to the Department within thirty (30) days from date of test completion.
- [MEDEP Chapter 115]
- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:
- A. within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and
 - B. the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and
 - C. the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.
- [MEDEP Chapter 115]
- (13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [MEDEP Chapter 115]

- (14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emission and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation. [MEDEP Chapter 115]
- (15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [MEDEP Chapter 115]

SPECIFIC CONDITIONS

(16) **Fuel Burning Equipment**

- A. NASB shall not exceed a combined fuel usage to the boilers, water heaters and air make-up units of #2 fuel oil, #1 fuel oil, and natural gas equivalent to 350,000 MMBtu/year heat input, based on a 12-month rolling total. Compliance shall be based on records of fuel use and a heating value of 0.140 MMBtu/gallon for fuel oil and 0.00103 MMBtu/scf for natural gas. [MEDEP Chapter 115, BPT]
- B. Sulfur content of the fuel oil fired (#2 fuel oil, #1 fuel oil) shall not exceed 0.50% by weight. Compliance shall be based on fuel records from the supplier or direct test analysis records. [MEDEP Chapter 115, BPT]

- C. Emissions shall not exceed the following limits. Compliance shall be demonstrated by stack testing upon request by the Department.

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Hangar 1, Boilers #1, #2, #3	PM	0.12	MEDEP Chapter 103, Section 2(B)(1)(a)
Bldg 86, Boilers #1, #2, #3	PM	0.12	MEDEP Chapter 103, Section 2(B)(1)(a)
Bldg 250, Boilers #1, #2, #3	PM	0.12	MEDEP Chapter 103, Section 2(B)(1)(a)
Bldg 211, Boilers #3, #4, #5	PM	0.12	MEDEP Chapter 103, Section 2(B)(1)(a)
Hangar 6, Boilers #1, #2, #3	PM	0.05	MEDEP Chapter 115, BPT
Hangar 6, Make-up units #1, #2, #3, #4	PM	0.05	MEDEP Chapter 115, BPT
Hangar 5, Boilers #1, #2, #3, #4	PM	0.12	MEDEP Chapter 103, Section 2(B)(1)(a)

- D. Emissions shall not exceed the following for each unit. Compliance shall be demonstrated by stack testing upon request by the Department.
[MEDEP Chapter 115, BPT]

Emission Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Hangar 1, Boilers #1, #2, #3	0.66	0.66	2.77	1.93	0.45	0.03
Bldg 86, Boilers #1, #2, #3	0.36	0.36	1.51	1.05	0.25	0.02
Bldg 250, Boilers #1, #2, #3	0.72	0.72	3.02	2.10	0.49	0.03
Bldg 250, Make-up #1	0.14	0.14	--	0.27	0.22	0.01
Bldg 211, Boiler #3	0.66	0.66	2.77	1.93	0.45	0.03
Bldg 211, Boilers #4, #5	0.74	0.74	3.12	2.17	0.51	0.03
Bldg 594, Boilers #1, #2	0.18	0.18	0.76	0.53	0.12	0.01
Bldg 516, Boiler #1	0.19	0.19	0.81	0.56	0.13	0.01
Bldg 54, Boiler #1	0.26	0.26	1.11	0.77	0.18	0.01
Bldg 645, Boiler #1	0.20	0.20	0.86	0.60	0.14	0.01
Hangar 6, Boilers #1, #2, #3	0.15	0.15	--	0.29	0.25	0.02
Hangar 6, Make-up #1, #2, #3, #4	0.24	0.24	--	0.46	0.39	0.03
Hangar 5, Boilers #1, #2, #3, #4	0.51	0.51	2.14	1.49	0.35	0.02
Bldg 512, Boiler #1	0.16	0.16	0.65	0.46	0.11	0.01
Bldg 512, Boilers #2, #3	0.15	0.15	0.63	0.44	0.10	0.01
Bldg 102, Make-up #1	0.08	0.08	--	0.15	0.12	0.01
Bldg 750, Water Heater #1, #2	0.09	0.09	--	0.18	0.15	0.01
Bldg 750, Make-up #1	0.06	0.06	--	0.12	0.10	0.01

- E. Visible emissions from the above fuel burning equipment shall each not exceed 10% opacity on a six (6) minute block average, except for no more than one (1) six (6) minute block average in a continuous 3-hour period.
[MEDEP Chapter 115, BPT]

(17) **Engines**

- A. NASB shall not exceed a combined fuel usage to the engines of diesel fuel and natural gas equivalent to 4,100 MMBtu/year heat input, based on a 12-month rolling total. Compliance shall be based on records of fuel use and a heating value of 0.137 MMBtu/gallon for diesel fuel and hours of operation and 0.00103 MMBtu/scf for natural gas. [MEDEP Chapter 115, BPT]
- B. Sulfur content of the diesel fuel fired shall not exceed 0.05% by weight. Compliance shall be based on fuel records from the supplier or direct test analysis records. [MEDEP Chapter 115, BPT]
- C. A written log documenting the hours of operation on a monthly basis for each engine shall be kept. [MEDEP Chapter 115, BPT]
- D. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Engine #47	PM	0.12	MEDEP Chapter 103, Section 2(B)(1)(a)
Engine #49	PM	0.12	MEDEP Chapter 103, Section 2(B)(1)(a)
Engine #50	PM	0.12	MEDEP Chapter 103, Section 2(B)(1)(a)
Engine #57	PM	0.12	MEDEP Chapter 103, Section 2(B)(1)(a)

- E. Emissions shall not exceed the following for each unit:
[MEDEP Chapter 115, BPT]

Emission Unit	PM (lb/hr)	PM₁₀ (lb/hr)	SO₂ (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Engine #4	0.27	0.27	0.12	9.88	2.13	0.78
Engines #18-1, 18-2, 18-3, 18-4	0.34	0.34	0.14	12.35	2.66	0.98
Engine #26	0.35	0.35	0.15	12.92	2.78	1.03
Engine #27	0.27	0.27	0.12	9.88	2.13	0.78
Engine #29	0.32	0.32	0.14	11.82	2.55	0.94
Engine #30	0.12	0.12	0.05	4.32	0.93	0.34
Engine #31	0.09	0.09	0.04	3.44	0.74	0.27
Engine #32	0.15	0.15	0.06	5.38	1.16	0.43
Engine #42	0.15	0.15	0.06	5.38	1.16	0.43
Engine #44	0.07	0.07	0.03	2.60	0.56	0.21
Engine #46	0.09	0.09	0.04	3.44	0.74	0.27
Engine #47	1.05	1.05	0.45	28.10	7.46	0.79
Engine #48	0.19	0.19	0.08	6.88	1.48	0.55
Engine #49	0.47	0.47	0.20	12.48	3.32	0.35
Engine #50	0.37	0.37	0.16	9.98	2.65	0.28
Engine #51	0.27	0.27	0.11	9.79	2.11	0.78
Engine #52	0.23	0.23	0.10	8.60	1.85	0.68
Engine #53	0.13	0.13	--	5.86	9.86	0.93
Engine #55	0.10	0.10	0.04	3.53	0.76	0.28
Engine #56	0.12	0.12	0.05	4.32	0.93	0.34
Engine #57	0.25	0.25	--	10.83	18.23	1.72
Engine #58	0.35	0.35	0.15	12.92	2.78	1.03

- F. Visible emissions from the Emergency Generator shall not exceed 20% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period.
[MEDEP Chapter 115, BPT]

(18) **Parts Washers (Degreasers)**

Parts washers at NASB are subject to MEDEP Chapter 130.

A. NASB shall keep records of the amount of solvent added to each parts washer. [MEDEP Chapter 115, BPT]

B. The following are exempt from the requirements of Chapter 130 [MEDEP Chapter 130]:

1. Solvent cleaners using less than two liters (68 oz) of cleaning solvent with a vapor pressure of 1.00 mmHg, or less, at 20° C (68° F);
2. Wipe cleaning; and,
3. Cold cleaning machines using solvents containing less than or equal to 5% VOC by weight.

C. The following standards apply to remote reservoir cold cleaning machines that are applicable sources under Chapter 130.

1. NASB shall attach a permanent conspicuous label to each unit summarizing the following operational standards [MEDEP Chapter 130]:
 - (i) Waste solvent shall be collected and stored in closed containers.
 - (ii) Cleaned parts shall be drained of solvent directly back to the cold cleaning machine by tipping or rotating the part for at least 15 seconds or until dripping ceases, whichever is longer.
 - (iii) Flushing of parts shall be performed with a solid solvent spray that is a solid fluid stream (not a fine, atomized or shower type spray) at a pressure that does not exceed 10 psig. Flushing shall be performed only within the freeboard area of the cold cleaning machine.
 - (iv) The cold cleaning machine shall not be exposed to drafts greater than 40 meters per minute when the cover is open.
 - (v) Sponges, fabric, wood, leather, paper products and other absorbent materials shall not be cleaned in the degreaser.
 - (vi) When a pump-agitated solvent bath is used, the agitator shall be operated to produce no observable splashing of the solvent against the tank walls or the parts being cleaned. Air agitated solvent baths may not be used.
 - (vii) Spills during solvent transfer shall be cleaned immediately. Sorbent material shall be immediately stored in covered containers.
 - (viii) Work area fans shall not blow across the opening of the degreaser unit.
 - (ix) The solvent level shall not exceed the fill line.
2. The remote reservoir cold cleaning machine shall be equipped with a perforated drain with a diameter of not more than six inches. [MEDEP Chapter 130]
3. NASB operates three (3) cold cleaning machines which use a solvent with a vapor pressure greater than 1.0 mmHg. NASB must apply for, and be granted, Departmental approval in order to continue operating this equipment after May 1, 2005. [MEDEP Chapter 130]

(19) **Fuel Storage Tanks**

- A. NASB shall maintain all fuel storage tanks in good working order in such a way as to minimize emissions. [MEDEP Chapter 115, BPT]
- B. NASB shall maintain records of monthly throughput for each non-exempt fuel storage tank which includes quantity and type of fuel. [MEDEP Chapter 115, BPT]

(20) **Fuel Dispensing Operations**

- A. All gasoline storage tanks located at a dispensing facility shall be equipped with a fill pipe that extends to within six (6) inches of the bottom of the tank. [MEDEP Chapter 118]
- B. NASB shall maintain records of monthly throughput for each tank which include quantity and type of fuel. [MEDEP Chapter 118]

(21) **Deicing Operations**

NASB shall maintain monthly records of all propylene glycol used for deicing. [MEDEP Chapter 115, BPT]

(22) **Painting Operations**

- A. NASB shall ensure that all coatings containing VOCs are stored in vapor tight containers to minimize the chance of spills and emissions. [MEDEP Chapter 115, BPT]
- B. NASB shall maintain all fabric filters in good working order to minimize emissions from the paint booths. [MEDEP Chapter 115, BPT]
- C. Visible emissions from the paint booths shall not exceed 10% opacity on a six (6) minute block average basis. [MEDEP Chapter 115, BPT]
- D. NASB maintain monthly records of material usage along with VOC content (as documented by MSDS sheets) to document the quantity of VOC emissions. [MEDEP Chapter 115, BPT]
- E. NASB is subject to, and shall comply with, the requirements of MEDEP Chapter 153, *Mobile Equipment Repair and Refinishing*.

(23) **Facility Wide Emission Limits**

- A. Total VOC emissions from the facility shall not exceed 48.0 tons per year (based on a 12-month rolling total). [MEDEP Chapter 115, BPT]
- B. Total HAP emissions from the facility shall not exceed 9.9 tons per year (based on a 12-month rolling total). [MEDEP Chapter 115, BPT]
- C. NASB shall maintain records of all non-exempt VOC and HAP usage at the facility to demonstrate compliance with the above emission limits. [MEDEP Chapter 115, BPT]

- (24) NASB shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard (Title 38 MRSA §605).

(25) **Annual Emission Statement**

In accordance with MEDEP Chapter 137, the licensee shall annually report to the Department the information necessary to accurately update the State's emission inventory by means of:

- 1) A computer program and accompanying instructions supplied by the Department;
or
- 2) A written emission statement containing the information required in MEDEP Chapter 137.

Reports and questions should be directed to:

Attn: Criteria Emission Inventory Coordinator
Maine DEP
Bureau of Air Quality
17 State House Station
Augusta, ME 04333-0017

Phone: (207) 287-2437

The emission statement must be submitted by the deadline specified in MEDEP Chapter 137.

(26) **Air Toxics Emission Statement**

In accordance with MEDEP Chapter 137, the licensee shall report, in a timeframe designated by the Department, the information necessary to accurately update the State's toxic air pollutants emission inventory by means of a written emission statement containing the information required in MEDEP Chapter 137.

Reports and questions on the Air Toxics emissions inventory portion should be directed to:

Attn: Toxics Inventory Coordinator
Maine DEP
Bureau of Air Quality
17 State House Station
Augusta, ME 04333-0017

Phone: (207) 287-2437

(27) **Payment of Annual License Fee**

NASB shall pay the annual air emission license fee within 30 days of January 31st of each year. Pursuant to 38 MRSA §353-A, failure to pay this annual fee in the stated timeframe is sufficient grounds for revocation of the license under 38 MRSA §341-D, subsection 3.

DONE AND DATED IN AUGUSTA, MAINE THIS DAY OF 2004.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
DAWN R. GALLAGHER, COMMISSIONER

The term of this license shall be five (5) years from the signature date above.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 9/27/04

Date of application acceptance: 10/14/04

Date filed with the Board of Environmental Protection: _____

This Order prepared by Lynn Ross, Bureau of Air Quality.